Supporting Information for

How Are Politicians Informed? Witness Testimony and Information Provision in Congress

A Additional Descriptive Statistics on Witness Appearances

Figure A1 breaks down the number of witnesses who testify by committee in the House, across time. Immediately, it is clear that there are some House committees – Appropriations, Ways and Means, and Commerce – who have historically invited more witnesses than other committees. Committees focused on procedural or internal matters, such as Rules, House Administration, and Standards of Official Conduct, have historically called the lowest number of witnesses. Figure A2 is similar to Figure A1 except for the Senate. Among the Senate committees, we see that committees with the highest number of witnesses are Appropriations, Interior and Insular Affairs, and Labor and Public Welfare. Rules and Administration, similar to its counterpart in the House, is one of the committees with the lowest number of witnesses, though is joined by Veterans' Affairs, Budget, and Foreign Relations. Of note is the fact that Foreign Relations in the Senate and its counterpart, Foreign Affairs in the House, both have low numbers of witnesses compared to the other committees.

Figures A3 and A4 show the average composition of witness affiliations by committee in the House and Senate.

Figure A5 plots the composition of witness types (grouped by parent category for illustrative purposes) called by each party when they are in the majority party in each chamber. The top bar in each panel shows the percentages of witnesses called of each category when the Republicans are in the majority (and hold all committee chairs) in that chamber. The bottom bar in each panel shows the percentages of witnesses called of each category when the Democrats are in the majority (and hold all committee chairs) in that chamber. Figure A6 presents the distribution of the composition of witnesses in the selected House committees by majority party. We focus on the years 2003-2010 (108th - 110th Congresses) where Democratic and Republican parties had the same share of the majority party status in the House (Republican party for the 108th and 109th Congresses and Democratic party for the 110th and 111th Congresses) to control for time-trends. We select the four committees that held the largest number of legislative hearings - Government Operations, Foreign Affairs, Judiciary, and Energy and Commerce - during the study period and examine whether different types of witnesses are invited to each committee depending on the majority party in the House.

Figures A7 and A8 present the number of witnesses by 18 different affiliation types over time in the House and Senate.



 ${\bf Figure}~{\bf A1}-{\rm Witnesses}~{\rm in}~{\rm House}~{\rm Standing}~{\rm Committees}~{\rm Across}~{\rm Time}$



 ${\bf Figure}~{\bf A2}-{\rm Witnesses}~{\rm in}~{\rm Senate}~{\rm Standing}~{\rm Committees}~{\rm Across}~{\rm Time}$



Figure A3 – Witness Affiliations By House Committee

Figure A4 – Witness Affiliations By Senate Committee





Figure A5 – Witness Affiliations by Majority Party

Notes: In each panel, the top bar presents the percentages of witnesses of each affiliation category called in that chamber when the Republicans are the majority party in that chamber. The bottom bars present the percentages of witnesses of each affiliation category called in that chamber when the Democrats are the majority party in that chamber.



Figure A6 – Witness Affiliations by Majority Party in Selected House Committees

Notes: Bars represent the percentages of witnesses of each affiliation cateogry called in the selected House committees by the majority party staus for the period 2003-2010.



Figure A7 – Number of Witnesses by Type: House

Figure A8 – Number of Witnesses by Type: Senate



B Measuring Analytical Information in Witness Testimonies

B.1 Keywords

The keywords that potentially cue that a testimony may contain some analytical information were chosen from three sources. First, we refer to the grandstanding score introduced in Park (2021) which assigns a continuous score to committee members' statements to measure political messaging activities in congressional hearings from the 105th to 114th Congresses. As a side-product of the score, members' statements scoring low are featured largely by either procedural statements or information-seeking statements. From the list of 200 most frequent word stems in the statements scoring the lower quartile of the score, we selected 74 word stems that were deemed relevant to bills (e.g., bill, law and legisl), sources of information (e.g. inform, letter, record and report), research (e.g., author, data, estim and studi), statistics (e.g., percent, rank and rate), logical relationship (e.g. relat, associ and differ), cost-benefit calculation (e.g., benefit, budget, cost and dollar), policy consequences (e.g., change, effect, impact and increase), and deliberation (e.g., discuss, possibl, and review). Then, we added one more word stem and two special characters: "statist", "%" and "\$". These word categories can be considered constituting a typical policy-making process which includes collecting information and data, analyzing them, assessing cost, benefit and possible consequences of policy alternatives, and finally deliberating and making decision on the choice of the alternatives.

Second, we additionally collected words that are related to cognitive orientation from the "Harvard IV-4" dictionary. Specifically, we chose 32 words in the following sub-categories: "know" (e.g., analyt, calcul and correl), "causal" (e.g., caus, consequ and odd), "compare" (e.g., less, higher and better) and "quan" (e.g., approx, averg and disproportion) and stemmed the words for the analysis.

Third, to complement the list, we identify 28 more word stems that are relevant to analytical information but not in the list of words described above (e.g., diagnosi, survey, examin, investig and measure) or the words that have similar meaning with that of the words in this list but not included in the list (e.g., percentag is similar to "percent"; contrast is similar to "differ"; result is similar to "consequ"). In total, we use 134 keyword stems for this study. The full list of the keywords is below.

B.2 The List of the 134 Keyword Stems

\$, %, address, analit, analysi, analyt, answer, approxim, assess, associ, author, averag, awar, benefit, better, bill, budget, calcul, case, caus, chang, classif, classifi, comment, compar, comparison, consequ, consid, content, contrast, contribut, correct, correl, cost, criteria, data, decid, decis, decreas, degre, determin, determinist, diagnosi, diagnost, differ, discuss, disproportion, dollar, effect, empir, equival, estim, evid, examin, explain, fact, factor, feasibl, fund, higher, impact, implaus, imposs, improv, increas, indic, influenc, inform, interest, investig, laboratori, law, legisl, less, letter, level, list, lower, mean, measur, necessari, need, number, object, odd, percent, percentag, plan, plausibl, point, polici, possibl, predict, probabl, process, product, project, propos, rais, rank, rate, reason, recommend, record, reduc,

refer, relat, report, requir, research, respond, respons, result, review, rise, risk, scienc, scientif, solut, solv, specif, standard, statement, statist, studi, substanti, survey, technolog, test, testifi, understand, unit, wors, yield

B.3 The Most and Least Analytical Testimony

B.3.1 With the length limit to include 50 to 150 words

The most analytical statements

- 1. "When projects are authorized, when there is a Chief's Report and the Congress authorizes a project, the economic analysis that is done on that calculates a benefit to cost ratio. And that benefit to cost ratio is based on a 3.125 discount rate. When the Office of Management and Budget evaluates projects for funding, including in the President's budget, that benefit to cost ratio is evaluated at a 7-percent discount rate. So the budgeting discount rate is different from the authorization discount rate that's used."
- 2. "We found that the differences are primarily—and this is a big amount of—the biggest chunk was in the estimate of labor costs associated with the subcontractors. There were costs also associated—of \$1.2 billions—associated with engine cost that was a difference in the estimate; also \$1 billion in terms of the production cost reduction plans, and also \$800 million difference in terms of what the Air Force's plans for—relating to productivity investments."
- 3. "In terms of offsetting the costs and benefits, we did offset those costs, so the benefits are reduced by the amount of those costs in terms of attributing–and that's in the cost/benefit analysis, but in analyzing the costs and in analyzing the benefits, we did reduce the benefits by those costs."

The least analytical statements

- 1. "Now, the access through public lands is, again, a heated debate. The President just drew an Executive Order declaring much of the border area and New Mexico as a monument, wilderness, whatever. They are all the same. Is the Organ Pipe National Monument, has that still got the signs up there requesting people not to go in there, American citizens, saying you should not go in there because it is too dangerous?"
- 2. "I guess we mistakenly believed that it was a secret location, and the only people who knew about it were the EOD staff from both SFPD, the FBI and the Sheriff's Office. Unbeknownst to us, this particular individual, and I won't say too much, but was a plumber in that area and apparently had seen the officers going into that area and perhaps followed them in."
- 3. "And don't forget by the way, sir, that we have right now-and the senator gets upset about this, but you have time to do this. We should do it this year. But we should adjust the system so that we get ready for 2017 when more money is going out than coming in, and we can do it."

B.3.2 Without the length limit

The most analytical statements

- 1. "Well, when you say higher costs, higher costs overall or higher costs—-"
- 2. "It would increase confidence, lower expected tax rates, and lower real interest rates."
- 3. "That is correct. The President's budget proposes a funding level of \$100 million."

The least analytical statements

- 1. "Thank you. I am going to ask my colleague, Mike Connor, to take that question."
- 2. "Thank you very much, Mr. Souder, and your staff for helping to deal me in today. I found out about this yesterday morning, and I'm pleased to be here. I am a former college administrator and teacher. My name is Dean, but I was one once."
- 3. "If Congress would like to do that, I would be absolutely thrilled."

B.4 The Statistical Validation Strategy for the Measurement of Analytical Information

This section explains how we constructed a human-coded validation measurement for the 100 sample paragraphs of witness testimonies. First, we randomly selected 1000 statements that witnesses made and keep only the statements with more than 80 words. Then, if a statement contains multiple paragraphs, we divide the statement by paragraph. Among the paragraphs or single-paragraph statements, we keep only those with less than 50 words or more than 150 words. Second, we measure the proportion of keywords for each paragraph. Third, we conduct random block sampling to construct 100 sample paragraphs to be human-coded; we select 20 paragraphs from each of the following five blocks: 0-0.05, 0.05-0.1, 0.1-0.15, 0.15-0.2, 0.2 or above. The thresholds are chosen such that they divide the range that the proportion of keywords in our data runs into five equidistant smaller ranges. Fourth, each of the 100 sample paragraphs are randomly matched with another paragraph to create 1000 pairs. Fifth, each of the two trained student research assistants compares 500 pairs and chooses the one that sounds more analytical. To define analytical information, we borrow the definition of analytical information from Esterling (2007). That is, a paragraph is analytical if it contains verifiable, fact-based, objective or positive statement as opposed to non-verifiable, experiential, opinion-based, subjective or normative. After collecting coders' choices, we fit a STAN model to measure the latent trait in the sample paragraphs and construct a continuous measurement as suggested in Carlson and Montgomery (2017).

The correlation coefficient between our measurement, the proportion of keywords, and the human-coded score resulting from the STAN model is 0.6, which provides statistical as well as substantive validation of our measurement. This correlation shows that they run in the same direction and this validation strategy is considered suitable for the purpose of showing descriptive analysis about the differences across witnesses' affiliation types.

B.5 Regression and Results

The regression equation is shown below:

Proportion of keywords_{s fhict} = $\alpha_0 + \beta *$ Hearing Characteristics_h + $\gamma *$ Committee Characteristics_{ct}

$$+\alpha_f + \alpha_i + \alpha_c + \alpha_t + \varepsilon_{sfhict}$$

where the subscripts indicate statements s, witness affiliations f, hearings h, issue i, committee c, and congress t.

In these regression models, we control for the following control variables. At the hearinglevel, we control for the number of times that a witness was asked to speak in a hearing, an indicator for whether a bill was considered, the number of committee members present, the number of witnesses present in a hearing, and a subcommittee hearing indicator. At the committee level, we include the ideological distance between the floor median and the committee median based on the DW-NOMINATE score to capture how ideologically extreme the committee is as a group, the distance between Democrats and Republicans in a committee to capture the level of polarization within a committee, the distance between the floor median and the committee chair to measure the ideological intensity of the chair, and the average legislative effectiveness score of the committee members who spoke in a hearing (Volden and Wiseman 2014). We also include congress fixed effects, committee fixed effects, hearing issue fixed effects (from the Policy Agendas Project), and witness affiliation fixed effects.¹

The results from this regression is shown in Table A1 below.

¹We also tested the partian effect on witness testimonies by adding an indicator for the congresses where the Democratic party was the majority party instead of the congress fixed effects. However, we did not find any statistically meaningful partian effects on all three dependent variables used in this analysis.

		Dependent varial	ole:
	Words	Keywords	Keywords/Words
	(1)	(2)	(3)
Number of Statements	66.521^{***}	3.391^{***}	-0.0001^{***}
	(0.331)	(0.020)	(0.00001)
Bill	-91.301^{***}	-3.313^{***}	0.0005^{**}
	(10.698)	(0.637)	(0.0002)
Number of Members	337.180***	11.059***	0.0004
	(53.204)	(3.166)	(0.001)
Number of Witnesses	-29.297^{***}	-1.686^{***}	-0.0001^{***}
	(0.994)	(0.059)	(0.00002)
Subcommittee Hearing	-44.006^{***}	0.020	0.001^{**}
	(13.578)	(0.808)	(0.0003)
Committee Ideology	-554.421^{***}	-11.078^{*}	0.009***
	(106.764)	(6.353)	(0.002)
Polarization of Floor	-679.374^{***}	-38.686^{***}	-0.0004
	(116.496)	(6.932)	(0.002)
Chair's Ideology	-248.777^{***}	-12.171^{***}	0.0001
	(51.078)	(3.040)	(0.001)
Avg. LES of Committee	7.279^{*}	0.404	-0.00002
	(4.327)	(0.257)	(0.0001)
Constant	$2,199.623^{***}$	108.552^{***}	0.047^{***}
	(91.597)	(5.451)	(0.002)
Witness Type FE	Yes	Yes	Yes
Issue FE	Yes	Yes	Yes
Committee FE	Yes	Yes	Yes
Congress FE	Yes	Yes	Yes
Observations	$33,\!605$	$33,\!605$	$33,\!605$
\mathbb{R}^2	0.652	0.604	0.149
Adjusted R ²	0.652	0.603	0.147

 ${\bf Table} ~ {\bf A1} - {\rm Regression} ~ {\rm Results} ~ {\rm Analyzing} ~ {\rm Witness} ~ {\rm Testimonies}$

Note: p<0.1; **p<0.05; ***p<0.01The dependent variable in the first model is the number of words spoken; in the second, the number of keywords spoken; and in the third, the proportion of keywords in the total number of words spoken.



Figure A9 – Number of Keywords by Witness Type

Notes: Vertical lines indicate 95% confidence interval.

B.6 Content Analysis in Witness Testimonies

Here, we present an additional analysis of witness testimonies. Specifically, we analyze whether and how different types of witnesses provide testimonies focusing on different content in hearings dealing with the same broader issue. For this analysis, we focus on hearings held on the "health" issue, which is one of the major topic categories constructed by the US Policy Agendas Project. We choose to analyze hearings on this issue because these hearings invited the most diverse set of witnesses in our witness dataset compared to the hearings dealing with other major issues.

Using the statements that witnesses made in House committee hearings on health-related issues from the 105th to 114th Congresses and the "stm" R package, we fit a structural topic model with 20 topics to explore latent topics in the witness testimonies.² Table A2 provides the 20 words with the highest probability to appear in each topic. Then, we grouped 20 topics into six meaningful topic categories to simplify the analysis comparing topical focus across nine witness categories: (a) [Medical] practice, (b) insurance, (c) government (e.g. policy implementation and monitoring), (d) lawmaking, (e) research, and f) junk topics (e.g. common nouns, verbs, adjectives and adverbs), and we use only the first five topic categories for the analysis.³

Figure A10 presents the number of statements that witnesses in each witness category spoke on each of the five topic categories. Note that the junk topic category is dropped from the graph. In hearings on health-related issues, witnesses from bureaucratic agencies and research institutions were invited and testified most frequently suggesting that hearings on this issue are largely oriented towards gathering analytical information based on the findings we present in the main text. In contrast, other groups are less likely to be invited to these hearings.

To compare the topical focus of each witness group, Figure A11 presents the proportion of statements for the same group of witnesses on each topic category. The witnesses from government agencies tend to provide testimonies mainly on the topics related to government (e.g. implementation and monitoring the progress of policy programs) and medical practices. The witnesses from research institutions are the group that provides the largest proportion of research-based testimonies. This analysis illustrates variations in the content of testimony that different types of witnesses provide to congressional committees, even when they are invited to discuss largely the same issue.

 $^{^{2}}$ We fit unsupervised topic models without specifying covariates. We fit models with 10, 20, and 30 topics. Ultimately, we chose the 20 topic model because it seemed that the topic clusters resulting from the 10 topic model needed more detailed classification of topics while the topic clusters from the 30 topic model seemed saturated with several overlapping topics. Thus, we proceeded with the 20 topic model.

³The 20 topics are grouped into 6 categories in the following manner: a) "Practice" includes medical practice, medical treatment, virus, medication, disease, youth health, and drug; b) "Insurance" includes health insurance, Medicare & Medicaid; c) "Government" includes inspection, crisis management, and veterans' health; d) "Lawmaking" includes lawmaking and hearing procedures; e) "Research" includes analysis, medical research, and stem cell research & women's health. The three junk topics tend to include common words (e.g. peopl, can, get, know, and realli). We labeled each of the 20 topics based on the 20 highest probability words as well as the 20 most frequent and exclusive words in each topic.

Topic Label	Highest Probability Words	Most Frequent and Exclusive Words
Virus	vaccin, virus, year, cdc, blood, diseas, flu,	vaccin, plasma, cjd, virus, thimeros, amal-
	influenza, immun, anthrax, dose, infect,	gam, chiron, flu, measl, influenza, mmr,
	mercuri, pandem, manufactur, season, pro-	tamiflu, antivir, h5n1, anthrax, mercuri,
	tect, anim, case, use	vaer, nile, season, midlothian
Lawmaking	issu, process, review, specif, recommend,	comment, rule, statut, criteria, advisori,
	believ, polici, standard, comment, meet,	commiss, draft, review, recommend, guid-
	discuss, agenc, requir, regul, rule, decis, ap-	anc, board, input, specif, opinion, meet,
	propri, author, propos, concern	standard, app, polici, process, expert
Inspection	medicar, provid, payment, program, plan,	hcfa, cms, contractor, audit, bid, fraud, fee,
	servic, contract, beneficiari, cms, manag,	contract, appeal, payment, beneficiari, oig,
	fee, claim, chang, requir, system, project,	claim, construct, icd, y2k, hcfas, overpay,
	fraud, part, process, also	adjust, improp
Health insur-	insur, health, plan, coverag, busi, employ,	insur, coverag, deduct, credit, employ,
ance	benefit, cost, small, care, market, afford,	erisa, premium, aca, afford, subsidi, rein-
	employe, premium, compani, privat, pay,	sur, busi, tax, uninsur, underwrit, medigap,
	tax, peopl, state	fehbp, employe, ahp, small
Drug	drug, treatment, abus, use, program, state,	methamphetamin, meth, heroin, ec-
	enforc, substanc, addict, communiti, law,	stasi, hidta, oxycontin, addict, traffick,
	counti, problem, also, prevent, campaign,	buprenorphin, marijuana, offend, opioid,
	crimin, year, alcohol, methamphetamin	methadon, dea, naloxon, cocain, crime,
		pseudoephedrin, jail, prison
Analysis	data, report, studi, use, test, inform, risk,	devic, data, reprocess, sampl, collect, ad-
	devic, evid, effect, base, safeti, result, clinic,	vers, analysi, valid, test, analyz, studi,
	collect, medic, assess, evalu, show, event	report, databas, survey, legionella, evid,
		analys, error, assess, event
Medication	drug, product, fda, market, compani, man-	counterfeit, generic, pharmaci, wholesal,
	ufactur, price, prescript, state, pharmaci,	brand, awp, heparin, formulari, inspect,
	industri, approv, consum, pharmaceut,	cosmet, pharmacist, pbms, patent, an-
	generic, inspect, import, regul, safeti, sup-	titrust, pharmaceut, ftc, fdas, adulter,
	pli	chain, pedigre
Crisis man-	health, state, work, public, depart, nation,	dhs, homeland, disast, biowatch, prepared,
agement	respons, feder, local, need, effort, program,	local, secur,,depart, capabl, infrastruc-
	develop, new, system, secur, emerg, also,	tur, katrina, fema, hhs, biosurveil, emerg,
	communiti, plan	threat, partner, capac, terrorist, strateg
Veteran	veteran, servic, care, mental, health, medic,	servicememb, warrior, polytrauma, vet-
	center, facil, program, militari, provid,	eran, dav, legion, pva, tbi, armi, reed, visn,
	need, member, famili, support, injuri, dod,	vet, vha, ptsd, prosthet, oefoif, marin, vas,
	nation, disabl, thank	soldier, cboc
Medicare &	percent, cost, year, program, state,	medicaid, spend, billion, budget, dollar, ex-
Medicaid	medicar, medicaid, increas, million, rate,	penditur, cap, financ, revenu, cbo, averag,
	fund, budget, spend, 000, pay, dollar, bil-	growth, per, estim, cut, senior, formula,
	lion, number, save, money	debt, gdp, percentag
Disease	diseas, ill, brain, condit, caus, effect, symp-	mrsa, antibiot, resist, gulf, tuberculosi,
	tom, can, disord, exposur, peopl, war, gulf,	staph, symptom, anabol, ill, asthma, brain,
	treat, problem, chronic, studi, use, one,	adhd, chelat, epilepsi, syndrom, nerv, res-
	treatment	piratori, neurolog, fluid, receptor

Table A2 – The Featured	Words	of Each	Topic
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Stem cell research & Women's	women, cell, prevent, american, human, suicid, diabet, health, organ, research, mi- nor, transplant, stem, risk, death, rate	clone, embryo, embryon, abort, hpv, preg- nanc, preterm, transplant, reproduct, post- partum accutan stem cervic smear pap
health	popul, clone, depress, donat	african, hispan, racial, women, somat
Procedural	chairman, thank, bill, committe, law, ques- tion, member, hear, inform, record, offic, today, testimoni, ask, legisl, congress, state- ment, answer, act, protect	privaci, senat, letter, bill, hipaa, whistle- blow, disclosur, file, constitut, statement, written, record, complaint, alleg, wit, apolog, page, legal, retali, memo
Youth health	children, famili, school, educ, parent, life, child, live, program, help, kid, young, need, student, age, autism, work, today, adult, peopl	footbal, parent, school, teacher, athlet, stu- dent, nfl, sport, boy, kid, child, children, pe- diatrician, coach, player, concuss, son, wel- far, girl, church
Medical Re- search	research, develop, new, institut, scienc, technolog, nih, diseas, fund, year, health, scientif, innov, import, invest, public, clinic, tobacco, support, need	smokeless, nanotechnolog, tobacco, nih, scienc, obes, genom, research, discoveri, biomed, irb, biotech, biotechnolog, path- way, innov, smoke, institut, acceler, dietari, cigarett
Medical Practice	care, health, patient, hospit, physician, provid, system, medic, qualiti, servic, ac- cess, practic, nurs, improv, home, need, communiti, rural, primari, area	telemedicin, nurs, specialti, hospit, physi- cian, rural, ehr, care, qualiti, primari, deliv- eri, electron, practic, practition, telehealth, home, dental, readmiss, access, reward
Medical Treatment	patient, cancer, treatment, therapi, screen, medic, treat, medicin, breast, diseas, pain, year, clinic, hepat, imag, surgeri, altern, prostat, mani, test	prostat, radiat, chemotherapi, oncologist, oncolog, tumor, cancer, breast, imag, ther- api, brachytherapi, scan, biopsi, screen, convent, imclon, mammogram mammo- graphi, colon, surgeri
Experiential (Junk 1)	year, time, day, said, just, month, doctor, one, know, back, got, get, went, week, last, never, came, call, come, everi	went, cruis, told, came, knew, guy, got, night, gave, hour, took, day, never, said, walk, week, sat, noth, saw, room
Response (Junk 3)	can, get, make, know, right, sure, work, yes, abl, now, back, inform, number, want, need, take, come, put, give, actual	sure, yes, sir, exact, right, make, get, abl, absolut, folk, back, put, piec, correct, can, send, tell, give, whatev, check
Opinion (Junk 2)	think, one, thing, peopl, look, just, know, say, realli, way, need, lot, like, differ, talk, see, tri, kind, problem, want	think, realli, thing, kind, lot, sort, someth, say, probabl, talk, bit, look, tri, way, pretti, just, mayb, obvious, everybodi, idea



Figure A10 – Topics of Testimony by Witness Categories

Notes: This graph shows the number of statements that witnesses in each category spoke on each topic.



Figure A11 – Topics of Testimony by Witness Categories

Notes: This graph shows the proportion of topics on which witnesses in each category testified.

C Institutional Conditions and Witness Invitation

Panel A Outcome (%) =	(1) No.Witness	(2) Diversity	(3) Bureau	(4) Research	(5) Corp.	(6) Labor	(7) Trade	(8) Membership
Bill	2.123^{***} (0.314)	6.460^{***} (0.522)	-7.605^{***} (0.765)	-1.919^{***} (0.365)	-1.551^{***} (0.385)	0.578^{**} (0.247)	1.939^{***} (0.497)	3.056^{***} (0.490)
Subcommittee	-0.896 (0.548)	6.228^{***} (0.736)	-5.019^{***} (1.682)	$\begin{array}{c} 0.593 \\ (0.830) \end{array}$	1.216^{***} (0.414)	$\begin{array}{c} 0.0450 \\ (0.173) \end{array}$	$\begin{array}{c} 0.0750 \\ (0.530) \end{array}$	0.838^{**} (0.382)
No. Comm. Members	$0.0403 \\ (0.0448)$	-0.0778 (0.0592)	-0.0234 (0.0994)	-0.00754 (0.0424)	$\begin{array}{c} 0.0100 \\ (0.0336) \end{array}$	$\begin{array}{c} 0.0202 \\ (0.0202) \end{array}$	0.0526^{**} (0.0204)	0.0917 (0.0551)
Floor Median-Comm. Median	-0.112 (4.393)	$6.150 \\ (3.831)$	$ \begin{array}{r} 1.592 \\ (8.129) \end{array} $	-5.113 (4.155)	-4.653^{***} (1.608)	$1.176 \\ (1.413)$	5.060^{***} (1.688)	6.209^{*} (3.272)
Comm. Dem-Comm. Rep	5.022^{*} (2.887)	-6.330^{*} (3.351)	$6.439 \\ (4.951)$	4.844^{*} (2.397)	-0.660 (1.665)	$1.322 \\ (0.986)$	-0.267 (1.326)	-3.379 (2.025)
Floor Median-Comm. Chair Number of Witness	2.243 (1.645)	-0.194 (3.043) 1.045^{***} (0.0988)	$\begin{array}{c} 4.686 \\ (3.770) \\ -1.009^{***} \\ (0.0909) \end{array}$	$^{-1.854}_{(1.616)}$ $^{0.0668**}_{(0.0267)}$	-0.0650 (0.863) 0.119^{***} (0.0229)	$\begin{array}{c} 0.544 \\ (0.531) \\ 0.0285^{***} \\ (0.00702) \end{array}$	$\begin{array}{c} -0.212 \\ (0.900) \\ 0.105^{***} \\ (0.0205) \end{array}$	$\begin{array}{c} -2.980 \\ (1.908) \\ 0.145^{***} \\ (0.0216) \end{array}$
N adj. R ² Mean Outcome Var.	$30994 \\ 0.157 \\ 9.8$	$30983 \\ 0.318 \\ 53.6$	30983 0.288 34.8	30983 0.128 9.3	$30983 \\ 0.130 \\ 8.1$	$30983 \\ 0.166 \\ 2.2$	$30983 \\ 0.161 \\ 5.7$	30983 0.224 7.8
Panel B Outcome (%) =	(9) Agri.	(10) Cong.	(11) Judicial	(12) Local Gov.	(13) Lawyer	(14) Nonprofit	(15) Healthcare	(16) Other
Bill	-0.106 (0.0869)	6.194^{***} (0.518)	$\begin{array}{c} 0.222\\ (0.185) \end{array}$	-1.216^{***} (0.316)	$\begin{array}{c} 0.153 \\ (0.116) \end{array}$	$\begin{array}{c} 0.775^{***} \\ (0.245) \end{array}$	-0.0612 (0.102)	-0.459^{*} (0.222)
Subcommittee	$0.155 \\ (0.0994)$	0.901^{**} (0.352)	$\begin{array}{c} 0.0196 \\ (0.0860) \end{array}$	$\begin{array}{c} 0.559 \\ (0.486) \end{array}$	-0.0799 (0.143)	1.551^{***} (0.402)	$\begin{array}{c} 0.181 \\ (0.154) \end{array}$	-1.034 (1.084)
No. Comm. Members	-0.0142^{*} (0.00783)	-0.0726^{*} (0.0387)	$\begin{array}{c} 0.00255 \\ (0.00510) \end{array}$	$\begin{array}{c} 0.00787 \\ (0.0284) \end{array}$	-0.0149 (0.00996)	-0.0176 (0.0202)	-0.0162^{*} (0.00885)	-0.0185 (0.0175)
Floor Median-Comm. Median	$0.496 \\ (0.633)$	$\begin{array}{c} 0.0771 \\ (3.126) \end{array}$	-1.714 (1.114)	-3.551 (2.442)	-0.648 (0.903)	$0.715 \\ (1.714)$	-0.578 (0.685)	$0.932 \\ (1.022)$
Comm. Dem-Comm. Rep	-0.742 (0.601)	-4.718^{*} (2.702)	$\begin{array}{c} 0.550 \\ (0.659) \end{array}$	-1.133 (0.980)	-0.259 (0.718)	-0.680 (1.396)	$\begin{array}{c} 0.305 \\ (0.573) \end{array}$	-1.622 (1.267)
Floor Median-Comm. Chair	$ \begin{array}{c} 0.521 \\ (0.482) \end{array} $	-1.496 (1.462)	-0.173 (0.224)	$0.485 \\ (1.116)$	-0.213 (0.290)	-0.420 (0.952)	$0.154 \\ (0.410)$	1.023 (1.185)
Number of Witness	0.0358^{**} (0.0170)	0.0946^{**} (0.0351)	-0.00596 (0.00541)	0.200^{***} (0.0283)	0.000859 (0.00287)	0.120^{***} (0.0172)	0.0196^{***} (0.00384)	0.0789^{***} (0.0107)
N adj. R ² Mean Outcome Var.	30983 0.332 1.0	$30983 \\ 0.146 \\ 7.7$	30983 0.087 0.6	$30983 \\ 0.175 \\ 8.5$	$30983 \\ 0.065 \\ 1.4$	$30983 \\ 0.091 \\ 6.7$	$30983 \\ 0.253 \\ 1.4$	$30983 \\ 0.074 \\ 4.1$

${\bf Table} ~ {\bf A3} - {\rm Hearing} ~ {\rm Characteristics} ~ {\rm and} ~ {\rm Witness} ~ {\rm Invitation} ~ {\rm Patterns}$

* p < 0.10 ** p < 0.05, *** p < 0.01. Congress, Committee, Issue FEs are included.

Panel A	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Outcome (%) =	No.Witness	Diversity	Bureau	Cong.	Research	Agri.	Corp.	Trade
Divide Government	-0.468 (0.340)	$\begin{array}{c} 0.313 \\ (0.766) \end{array}$	-2.613^{**} (0.941)	0.965^{**} (0.344)	2.151^{***} (0.691)	0.161^{*} (0.0818)	0.238 (0.405)	-0.0239 (0.272)
Democratic Majority	0.150 (0.319)	$0.450 \\ (1.152)$	-1.421 (1.217)	-0.375 (0.438)	1.374^{*} (0.727)	-0.379^{**} (0.137)	0.486^{*} (0.272)	-1.172^{***} (0.341)
Bill	2.149^{***} (0.317)	6.422^{***} (0.540)	-7.533^{***} (0.785)	6.188^{***} (0.522)	-1.943^{***} (0.362)	-0.106 (0.0842)	-1.574^{***} (0.376)	1.926^{***} (0.501)
Bubcommittee	-0.909 (0.545)	6.131^{***} (0.732)	-4.961^{***} (1.660)	0.854^{**} (0.341)	0.580 (0.834)	0.147 (0.0976)	1.199^{***} (0.415)	0.0621 (0.526)
No. Comm. Members	0.0352 (0.0402)	-0.0166 (0.0551)	-0.0507 (0.0910)	-0.0765^{*} (0.0390)	0.00658 (0.0389)	-0.0142^{*} (0.00698)	0.0151 (0.0302)	0.0527^{**} (0.0203)
Floor Median-Comm. Median	-0.187 (4.287)	6.737 (4.797)	0.984 (8.459)	0.251 (3.074)	-4.310 (4.120)	$\begin{array}{c} 0.369 \\ (0.532) \end{array}$	-4.667*** (1.564)	5.078^{***} (1.591)
Comm. Dem-Comm. Rep	5.418^{*} (2.741)	-6.674^{*} (3.445)	6.445 (4.890)	-5.356^{*} (2.614)	4.514^{*} (2.290)	-0.746 (0.610)	-0.211 (1.544)	-0.0954 (1.330)
Floor Median-Comm. Chair	1.974 (1.629)	-0.812 (3.241)	4.409 (3.682)	-1.565 (1.495)	-1.564 (1.515)	$0.475 \\ (0.466)$	-0.308 (0.978)	-0.209 (0.933)
Number of Witness		1.043^{***} (0.0987)	$^{-1.005^{***}}_{(0.0910)}$	0.0965^{**} (0.0351)	0.0650^{**} (0.0267)	0.0355^{**} (0.0169)	0.119^{***} (0.0229)	0.105^{***} (0.0205)
N	30994	30983	30983	30983	30983	30983	30983	30983
adj. R^2 Mean Outcome Var.	$0.154 \\ 9.8$	$0.316 \\ 53.6$	$0.287 \\ 34.8$	$0.145 \\ 7.7$	0.128 9.3	$0.332 \\ 1.0$	$0.130 \\ 8.1$	$0.161 \\ 5.7$
Panel B Outcome $(\%) =$	(9) Judicial	(10) Local Gov.	(11) Lawyer	(12) Labor	(13) Nonprofit	(14) Healthcare	(15) Membership	(16) Other
Divided Government	-0.0387	0.108	0.290*	-0.410***	-0.224	-0.214	-0.659	0.271
	(0.0504)	(0.270)	(0.152)	(0.135)	(0.278)	(0.163)	(0.396)	(0.365)
Democratic Majority	$\begin{array}{c} 0.0723 \\ (0.0993) \end{array}$	-0.287 (0.457)	0.361^{**} (0.172)	0.340^{***} (0.100)	$\begin{array}{c} 0.572 \\ (0.531) \end{array}$	-0.0582 (0.162)	-0.114 (0.484)	$0.601 \\ (0.564)$
Bill	0.223 (0.185)	-1.212^{***} (0.320)	0.152 (0.116)	0.584^{**} (0.245)	0.774^{***} (0.246)	-0.0632 (0.103)	3.057^{***} (0.493)	-0.475^{**} (0.215)
Subcommittee	0.0210	0.558	-0.0684	0.0518	1.577***	0.176	0.842**	-1.041
	(0.0848)	(0.481)	(0.141)	(0.173)	(0.403)	(0.152)	(0.369)	(1.075)
No. Comm. Members	0.00256 (0.00510)	$0.0176 \\ (0.0283)$	-0.0131 (0.00923)	0.0176 (0.0187)	-0.0137 (0.0196)	-0.0137 (0.00837)	0.0861^{*} (0.0491)	-0.0162 (0.0183)
Floor Median-Comm. Median	-1.707 (1.110)	-3.758 (2.494)	-0.579 (0.979)	$ \begin{array}{c} 0.877 \\ (1.284) \end{array} $	$0.902 \\ (1.618)$	-0.436 (0.676)	6.057^{*} (3.150)	0.938 (1.043)
Comm. Dem-Comm. Rep	0.445	-0.644	-0.297	1.456	-0.860	-0.0215	-3.424^{*}	-1.205
	(0.002)	(0.000)	(0.000)	(1.000)	(1.400)	(0.004)	(1.501)	(1.124)
Floor Median-Comm. Chair	-0.112 (0.196)	(1.182)	-0.135 (0.327)	(0.449) (0.508)	-0.399 (0.926)	$0.174 \\ (0.406)$	(1.982)	1.084 (1.078)
Number of Witness	-0.00611 (0.00528)	0.200^{***} (0.0284)	$\begin{array}{c} 0.000304 \\ (0.00290) \end{array}$	0.0286^{***} (0.00723)	$\begin{array}{c} 0.119^{***} \\ (0.0172) \end{array}$	0.0192^{***} (0.00383)	0.145^{***} (0.0213)	0.0781^{***} (0.0107)
N	30983	30983	30983	30983	30983	30983	30983	30983
adj. R ² Mean Outcome Var	0.087 0.6	0.175 8 5	0.065 1 4	0.165 2 2	$0.090 \\ 6.7$	0.253 1 4	0.225	0.074 4 1
· · · · · · · · · · · · · · · · · · ·	0.0	0.0	±1		0.1			***

 ${\bf Table} ~ {\bf A4} - {\rm Institutional} ~ {\rm Characteristics} ~ {\rm and} ~ {\rm Witness} ~ {\rm Invitation} ~ {\rm Patterns}$

* p < 0.10 ** p < 0.05, *** p < 0.01. President, Committee, Issue FEs are included.

	(1)	(2)	(3)
Outcome = Bureaucrat as Witness (%)			
Divided Government	-2.153^{**}	-0.292	-1.304*
	(0.796)	(0.897)	(0.694)
Democratic Majority	-2.062	-1.500	-2.010
	(1.377)	(1.468)	(1.386)
Bill	-7.617^{***}	-7.662***	-7.597^{***}
	(0.794)	(0.791)	(0.793)
Subcommittee	-4.990^{***}	-4.906***	-4.969^{***}
	(1.503)	(1.673)	(1.497)
No. Comm. Member	-0.0432	-0.0420	-0.0396
	(0.0950)	(0.102)	(0.0947)
—Floor Median-Comm. Median—	-0.181	1.027	-0.0389
	(8.497)	(9.386)	(8.385)
Comm.Dem-Com.Rep	7.756	6.249	7.760
	(5.114)	(5.673)	(5.108)
—Floor Median-Comm.Chair—	4.101	5.705	4.182
	(3.819)	(4.130)	(3.853)
Number of Witness	-1.028***	-1.029***	-1.028***
	(0.0936)	(0.103)	(0.0934)
Issue Decile^a	. ,	0.401**	
		(0.169)	
Divided Government \times Issue Decile		-0.384**	
		(0.147)	
High Salient Issue ^{b}		× /	1.704^{**}
0			(0.687)
Divided Government \times High Salient Issue			-1.562**
			(0.683)
	01		
N	31773	27270	31773
adj. <i>K</i> "	0.275	0.277	0.275

Table A5 – Divided Government, President's Issue Priority, and Bureaucrats as Witnesses

* p < 0.10 ** p < 0.05, *** p < 0.01. President and committee FEs are included. Standard errors are clustered at the committee level. Hearing- and committee-level controls are included. **a**: President's issue priority measure based on the State of the Union speeches. It ranges from 1 to 10: 1 = least frequently mentioned issue, 10 = most frequently mentioned issue. **b**: 1 if *Issue Decile* ≥ 5 and 0 otherwise.

Variable	Coef.	Std. Err.	t-stat	P-value	[95% Conf.	Interval]
Treated	-0.0183	0.6563	-0.03	0.978	-1.3833	1.3466
101th Congress	0.0208	0.2794	0.07	0.941	-0.5603	0.6020
102th Congress	-0.7329	0.4251	-1.72	0.099	-1.6169	0.1511
103th Congress	-0.9991	0.6318	-1.58	0.129	-2.3130	0.3148
104th Congress	0.9819	0.5590	1.76	0.094	-0.1806	2.1444
105th Congress	-1.6116	0.6859	-2.35	0.029	-3.0381	-0.1851
106th Congress	-1.9415	0.6694	-2.9	0.009	-3.3337	-0.5493
treatedX101th Congress	-0.6811	0.4862	-1.4	0.176	-1.6922	0.3300
treatedX102th Congress	-0.0100	0.5651	-0.02	0.986	-1.1852	1.1652
treatedX103th Congress	-0.2014	0.8994	-0.22	0.825	-2.0718	1.6690
treatedX104th Congress	-2.0086	0.6082	-3.3	0.003	-3.2734	-0.7438
treatedX105th Congress	-0.5624	0.7880	-0.71	0.483	-2.2012	1.0764
treatedX106th Congress	-1.1619	0.7721	-1.5	0.147	-2.7676	0.4439
Bill	2.2112	0.4534	4.88	0	1.2684	3.1541
Subcommittee	-1.1215	0.8328	-1.35	0.192	-2.8534	0.6104
Number of Committee Member	-0.0154	0.0413	-0.37	0.712	-0.1014	0.0705

Table A6 – Elimination of OTA on the Number of Invited Witness

Notes: Number of observation is 10,179. Prob >F = 0.0000. Adj R-squared = 0.0677. Issue fixed effects are included. Standard errors are clustered at the committee level.

Variable	Coef.	Std. Err.	t-stat	P-value	[95% Conf.	Interval]
Treated	3.993364	2.7699	1.4400	0.1640	-1.766887	9.753615
101th Congress	-0.3568618	0.4594	-0.7800	0.4460	-1.312171	0.5984473
102th Congress	1.250601	0.9309	1.3400	0.1930	-0.6853599	3.186562
103th Congress	-0.5356855	0.8278	-0.6500	0.5250	-2.257258	1.185887
104th Congress	1.045746	0.9077	1.1500	0.2620	-0.8420227	2.933514
105th Congress	1.103274	0.9820	1.1200	0.2740	-0.9388484	3.145397
106th Congress	0.7270946	0.9801	0.7400	0.4660	-1.31112	2.765309
treatedX101th Congress	0.0767433	0.5936	0.1300	0.8980	-1.157769	1.311256
treatedX102th Congress	0.4090257	1.8902	0.2200	0.8310	-3.521845	4.339896
treatedX103th Congress	0.6340882	1.0286	0.6200	0.5440	-1.504983	2.773159
treatedX104th Congress	-4.594514	0.6603	-6.9600	0.0000	-5.967743	-3.221285
treatedX105th Congress	-1.748871	0.8168	-2.1400	0.0440	-3.447461	-0.0502822
treatedX106th Congress	-3.706158	0.9647	-3.8400	0.0010	-5.712429	-1.699888
Bill	-1.811747	0.5606	-3.2300	0.0040	-2.977584	-0.6459086
Subcommittee	-2.064094	1.5808	-1.3100	0.2060	-5.351648	1.22346
Number of Committee Member	0.0176605	0.0659	0.2700	0.7910	-0.1193818	0.1547028

Table A7 – Elimination of OTA on the Invitation of Research Witness

Notes: Number of observation is 10,172. Prob >F = 0.0000. Adj R-squared = 0.0787. Issue fixed effects are included. Standard errors are clustered at the committee level.



Figure A12 – Number of OTA Assessment Request by House Committees, 1990-1995

Figure A13 – Changes in the Number of Committee Staff

